

METHOD FOR THE PRODUCTION OF FINE METAL POWDER, ALLOY POWDER AND COMPOSITE POWDER

ABSTRACT OF THE INVENTION

There is provided a method of producing a metal powder, alloy powder or composite powder having a mean particle diameter D50 of less than or equal to 25 μm , as determined using a particle size measuring apparatus (e.g., a MICROTRAC X 100 particle size measuring apparatus) in accordance with ASTM C 1070-01. The method includes, first providing a starting powder having a mean particle diameter D50 of greater than 25 μm . The starting powder is then subjected to a deformation step, thereby forming flake-like particles having a particle diameter to particle thickness ratio of between 10:1 and 10,000:1. The flake-like particles are then subjected to comminution grinding in the presence of a grinding aid.